

## C L A I M S

1. An x-ray apparatus characterized by comprising:

a cathode which irradiates an electron beam;

5 a target which is irradiated by the electron beam and generates x-rays; and

a magnet portion which moves the irradiation position of the electron beam that is irradiated on the target.

10 2. The x-ray apparatus according to claim 1, characterized in that the target is disposed so as to be fixed with respect to the cathode.

3. The x-ray apparatus according to claim 2, characterized in that the magnet portion generates  
15 a magnetic field which traverses the electron beam.

4. The x-ray apparatus according to claim 1, w characterized in that the magnet portion is disposed rotatably about the axial direction of the electron beam and the irradiation position of the electron beam  
20 is changed due to this rotation.

5. The x-ray apparatus according to claim 4, characterized in that the magnet portion has a pair of magnets which are separated in the diameter direction of the rotation and oppose different magnetic poles.

25 6. The x-ray apparatus according to claim 4, characterized in that the magnet portions are disposed so as to oppose each other and the electron beam

interposed by the magnet portions.

7. The x-ray apparatus according to claim 1, characterized in that the magnet portion comprises a plurality of pairs of opposing electromagnets between which the electron beam is interposed, and control means for changing the synthesized magnetic field formed by these electromagnets.

8. The x-ray apparatus according to claim 7, characterized in that the control means controls at least one of the energizing amount and the current direction of the plurality of pairs of electromagnets.

9. The x-ray apparatus according to claim 1, characterized in that the magnet portion comprises a plurality of pairs of opposing electromagnets between which the electron beam is interposed, and

a selected pair of electromagnets is energized and the irradiation position on the target of the electron beam is controlled, and after a set time has elapsed, another set of electromagnets is energized.

10. The x-ray apparatus according to any one of claims 1 to 9, characterized by further comprising a plurality of focusing electrodes between the target and the cathode, and

the position of the magnet portion in the axial direction of the electron beam is between the focusing electrode which is closest to the target side and the cathode.